



Loudoun County, Virginia

www.loudoun.gov

Board of Supervisors

1 Harrison Street, S.E., 5th Floor, MSC #1, Leesburg, VA 20175

Telephone (703) 777-0204 • Fax (703) 777-0421 • email: bos@loudoun.gov

March 12, 2015

Dear Loudoun Water Board,

Thank you for your recent decisions to pay for the installation of the water membrane system for the water supply infrastructure you maintain for Raspberry Falls and Selma Estates, as well as for tabling the Red Hill Road 600 zone water tower until next year.

Since the Red Hill Road water tower is in the Blue Ridge District, that is what I will address today and have provided you further information in the attached folder. To that end, in your February 12, 2015 meeting, in your discussion on the Red Hill water tower, you mentioned tabling the item until next year because you felt it was being rushed and that you want to go back and take a further look at the project.

Once again, I thank the Water Board for tabling the Red Hill water tower item until 2016 and for stating you want to look into the options further. I have provided direct statements below from Water Board members who engaged in the discussion on the motion on February 12th.

Chairman Rocca - I just want to table this issue until next year. Give staff a chance to look at this thing again and see where we are going to go. We don't need it right now. It doesn't have to be done. It is not an emergency. So I would like it tabled.

Chairman Rocca – Yes or whenever we get it into our schedule. They've got some work to do on this thing. I don't wanna be pushing on them. I want them to get all the right information.

Water Board Staff, Rak – Mr. Chairman, so the item on the agenda is the award of the design task order. So as I understand the motion, the Board is moving to table a decision on awarding the design task order.

Chairman Rocca - Correct

Chairman Rocca – I get the feeling this thing is being rushed into. We don't have to have it till 18 or 17 or whenever and I just want to table this thing.

Water Board Staff, Rak – The current contract with Mr. Rouse requires that the closing occur by July of this year.

Board Member Mitchel – And that is irrespective of any designs or anything else.

Water Board Staff, Rak – That doesn't have anything to do with the design of the tank. It would just be the acquisition of the property.

Board Member Mitchel – But you are still going to move forward with the closing on the property.

Chairman Rocca – Yes...

Board Member Mitchel – So what we are tabling for one year is the design only.

Chairman Rocca - Just tabling the design on this thing for a year.

Board Member Mitchel – As a friendly amendment – that we can table the designs of it until next year. However, I would like to have a better understanding of the ground alternative that we have been hearing about.

Chairman Rocca – That is what the tabling is. You can ask staff for anything you want. But right now, I just want to table the design of this thing until next year.

Board Member Mitchel – So irrespective of whatever ultimately might be constructed, whether it is inground, above ground, or really above ground, then the property is still the right spot?

Water Board Staff, Jennings – What staff has compiled to this point is, and we are available at any time – we could do it at the next Board meeting or workshop however you would like is to explain the entire process that supports this existing application for an elevated tank. We also before the Board did a fairly extensive review of what the impact was for putting an elevated not a tall tank but an at grade tank. We have never looked at a below ground tank.

Board Member Mitchel - I understand that. My interest is more about at ground.

Water Board Staff, Jennings – Our review of this site has always been evaluated for an elevated tank. If we were not to go with the elevated option I can't say it's the best site. We may would have preferred to put it elsewhere.

Water Board Staff, Jennings - Not to mis-speak and I'll leave it to Mike. It is doable but may not be the optimal site. That is what I am told.

Board Member Koblos – We are not voting on buying the site today, right?

Water Board Staff, Jennings – We have time.

Board Member Koblos – That is what I am saying. We can get back from staff information before we actually say ok. We have till July to vote on the site.

Water Board Staff, Rak –that is correct, that is correct

Board Member Mitchel – putting off the design, off the table for a year. I can understand but I would like to get some information during this time.

Board Member Mitchel – Given that this is our 2nd crack at it, we had another site that we abandoned or whatever went away from, and this is our second crack at it and you know I think it's; there is a lot of information floating around and in fairness to our newer members and so forth, I think they need to hear the positives/negatives of above ground, at grade and so forth, costs and so forth because as was said earlier, we're kind of at a inflection point if you go to a more expensive option that may be what you are locked into for the future so we wanna , so personally I wanna understand it to be sure where we are at this point. How many other towers must be built or tanks above ground at grade or whatever.

Chairman Rocca – And there's are a lot of other factors that have come to bear on this, Lenah, there is all kinds of things that are going to impact this that you guys don't know about. So I want you to be aware of what they are and how it is going to impact this thing, so by tabling this thing ...you know, we can have time to look at this and restudy our situation, rethink our position. See if we are in the right barn.

Chairman Rocca – I have a motion to call for the vote. Those in favor of tabling this motion – signify by saying Aye.

Chairman Rocca – Those opposed.....let the record show that it was unanimous (approval).

Water Board Staff, Jennings – May I clarify one thing Mr. Chairman. To Mr. Mitchell's point, staff has, we have done a lot of that work you are describing, this has been pretty heavily vetted in public forums. So at any point that

you would like us to provide that background and detail, we are more than willing to setup, it will take a little bit of time to go through – we are happy to.

Board Member Mitchel – But the commission permit that is approved.....allow us to do any of the two alternatives that we have that is above ground?

Water Board Staff, Rak – yes

Board Member Mitchel – Ok

Chairman Rocca – Well, I've been laboring over this thing for quite awhile and I just didn't think that we had covered all our bases in being thorough in what we are doing.

These statements were captured in the audio recording of the February 12th meeting, but were not reflected in the draft meeting minutes your staff provided to my office. Therefore, I am requesting that you revise your meeting minutes of the February 12th meeting to include the complete discussion, particularly since your discussion was on such a controversial and important matter that impacts many people. Also, as you know, there were many people in attendance of the meeting on the 12th. Many of these residents had taken time off of work and their schedules to attend your 3pm meeting. The 3pm meeting time is a difficult time for many people as it is in the middle of the work day. Therefore, out of deference to the community I respectfully request you reconsider holding your meetings at a later hour, sometime after 5pm, such as the County Board of Supervisors and the School Board does. I feel moving your meeting time to a later hour is a reasonable request and in order to accommodate public input timeframes.

In closing, I and the community impacted appreciates your decisions on February 12th, but there has been some confusion created regarding the actions that your Board took on the Red Hill water tower and particularly what was said. This is why it is important that you have your meeting minutes completely reflect the comments made by the Board on the motion. Also, the folder I have provided attached to this letter includes several documents related to the Red Hill water tower, which I appeal to you to review. I know many of you plan to obtain more information from staff, but as Board members I also respectfully request that you meet with me and the community before you move forward with further discussions on what you want to do with the tower.

While I respect the work your staff does, there are a number of concerns related to the process, as well as the information that was provided to you up to this point. You will see reference to many of these concerns in the matrix document in your folders. Also, I believe it is time for the County to move to the next level of sophistication in water tower infrastructure by constructing towers tree height or below in the transition zone and other needed areas, as this would also open up the number of viable site options for water storage structures. This would be in keeping with the diverse approach that other jurisdictions have found to be helpful for their water storage options.

Respectfully,



Supervisor Janet Clarke
Loudoun County, Blue Ridge District
Janet.Clarke@loudoun.gov
(Cell) 540.303.9689
(Office) 703.777.0210

**SUPERVISOR JANET CLARKE'S SUMMARY OF LOUDOUN WATER'S ANALYSIS OF
600 ZONE WATER STORAGE RELATED TO RED HILL SITE**

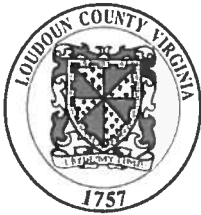
	IMPACT	RED HILL SITE	IN CONTRAST TO	PROBLEMS WITH ANALYSIS
1	Consideration Of Community Impact	In Urban Engineering's <u>Alternate Site Analysis</u> , Rouse site is evaluated, but existing Red Hill community is never mentioned. Red Hill community has been in existence for over 60 years and is within feet of the proposed tower site.	Urban Engineering's <u>Alternate Site Analysis</u> provides a review of Willowsford sites. Study indicates Willowsford sites will "likely be met with opposition from the new lot owners who purchased their property without a storage tank being identified on the plans. The developer may also take issue with this as it could affect open space amenities and future lot sales."	Why were future home owners and lot sales in Willowsford considered in the <u>Alternate Site Analysis</u> , but the pre-existing adjacent Red Hill Community was ignored.
2	Community Benefit	LW staff justified Red Hill site by saying adjacent homes will benefit. This does not make sense because over 70% of homes off Red Hill Rd are in the Rural Planning Area and therefore are ineligible for water service. Tank site is only 1000' from Rural policy area.	LW staff justified Brambleton tanks saying -- all homes within 0.5 mile would be served by tanks.	Why did LW staff pick a site on the border of the Rural Planning Area where the majority of the surrounding community is ineligible for water service and all communities to the west are ineligible as well? If LW believes that "growth pays for growth", why is the established Red Hill Community and other non-public water served residents expected to bear the growth impact.
3	Community Outreach	LW staff only notified 5 adjacent property owners.	<p>Dulles South towers – LW developed Public Participation Program including:</p> <ul style="list-style-type: none"> • Citizen Advisory Committee • Information outreach: bill stuffers, mailings, briefings to HOA's, web page & dedicated email address, hotline, and newspaper articles • Approximately 13,000 mailers were sent out to homes within 2 miles. Balloon test was announced in the newspapers. 	<p>Why was the outreach conducted so inequitable compared to the Dulles South towers? There are approximately 1,258 homes located within 2 miles of the Red Hill site, but only 5 adjacent property owners were notified. There should be consistency in LW site evaluations? The process for the Dulles South site was completely transparent. However, when the Red Hill community asked to be part of the process, they felt they were ignored.</p>

4	Community Involvement	Residents from Red Hill Road, Watson Road, Evergreen Mills Road, and Greene Mill Preserve showed up at the Red Hill site on the day of the balloon test with questions, and a LW staff member got frustrated and said "this is the problem with people <u>knowing</u> about this".	With Dulles South site - the community was involved and the balloon test was advertised in the papers and 7,000 mailers went out to the community.	Once again, why didn't LW involve the public with the Red Hill site to the same criteria of 2 miles (as done with the Dulles South site) versus only 5 property owners? The appearance is that LW staff did their best to hide everything. The community tried to shed light on these inconsistencies, but they were ignored.
5	Inconsistent and conflicting LW Staff information	<p>TIMING:</p> <ol style="list-style-type: none"> On November 19, 2013, LW told the community the water storage was needed in 2016-2020. On March 18, 2014, they told the community it was needed in 2018. LW told the Planning Commission that they were not sure what their Plan B was if the project was denied. Mark Peterson told the BOS Transportation and Land Use committee on October 17, 2014, that they would have to take another look at Plan B if the application was denied. At the final vote on this item, LW staff told the BOS they needed the tower immediately. In the February 12, 2015, LW Board meeting, Chairman Johnny Rocca stated the tower was being rushed and that it is not needed until 2018. 	<ol style="list-style-type: none"> On November 5, 2014, just before the Board of Supervisors vote, Loudoun Water told the BOS that the water tower was needed NOW or service reliability would be impacted. Tom Lipinski, LW consultant, told the BOS, "The timing is pretty much now. If delayed - we would basically be eating into the margin of reliability that we have for the system that we have out there". Lipinski also stated LW "would be running a system that would become less and less reliable" Several Supervisors believed this pitch and mentioned the urgent need and said they could not deny it and put service at risk. Supervisor Letourneau said, "we are hearing from LW that there is an IMMEDIATE NEED and the reality is if we don't do something to address that immediate need in the next year or so then the entire system is going to suffer for it", which is contrary to what is known of the actual timeframe for need. 	<p>Information provided to the community and the BOS by LW staff was different. The changing LW staff story of the timing need was perceived by many as a tactic to gain BOS approval by threatening service reliability. LW staff's statements to the BOS, left the community wondering how LW failed to plan for the 600 Zone to the extent that service reliability became an issue? Once again, on February 12, 2015, the LW Board Chairman said "we have time, we don't need it now" and tabled the item for a year. Then Chairman Rocca said "we don't have to have it till 18 or 17 or whenever..."</p>

6	Inconsistent and conflicting LW Staff information	ACCESS: At the balloon test and community meeting Supervisor Clarke asked for, residents were told the Red Hill site was preferred because it was cheaper due to direct access from Red Hill Rd.	1. 1-Planning Commission added condition that prohibited construction access from Red Hill Rd. 2. LW told the BOS on September 10th that they will not build on the site if they do not have access. 3. However, on October 17, 2014, LW Attorney Jonathan Rak told the Transportation and Land Use Committee, "we could acquire that easement for the access by eminent domain".	The community was told that direct access from Red Hill Rd was a key feature of the site, yet the Planning Commission realized that it was not feasible and prohibited construction access from using Red Hill Rd. Throughout the process, clearly defined access was an issue and several Planning Commissioners and Supervisors questioned, how they could approve a site without access. LW staff assured decision makers that they assumed the risk that they had access or they would not build on the site. However LW staff's story quickly turned to we will use eminent domain if needed.
7	Cost estimates	LW staff provided inconsistent and escalating cost estimates.	The estimates do not remotely resemble that of building lower ground storage tanks in other jurisdictions, including Prince William County and Fairfax County.	The cost estimates provided by LW staff appear inconsistent. Why do the cost estimates for ground storage almost double from May 2014 to October 2014?
8	Misrepresentation of impacts to surrounding communities	LW told the community that there will be NO TANK VISIBILITY at the entrance to Greene Mill Preserve off Evergreen Mills Road.	Pictures taken during the LW balloon test indicate that the water tank will clearly be visible at the Greene Mill Preserve entrance	It is felt that LW misled residents, the Planning Commission, and the BOS when they indicated NO TANK VISIBILITY at the entrance to Greene Mill Preserve, in their presentation. Residents were later shocked to see images with the balloon clearly visible at the same location. Residents were left with a feeling of mistrust toward LW staff.
9	Misrepresentation of impacts to surrounding communities	Virtual images were never provided from Gilbert's Corner, yet residents have asked about potential impacts to the Gilbert's Corner historic area for years.	Pictures taken during the LW balloon test indicate that the water tank will be clearly visible just north of Gilberts Corner (less than 0.25 miles north of Routes 15 & 50).	Why wasn't the Gilbert's Corner watershed addressed? LW released images from Route 15 & Creighton Farms Drive. Why were there no images from Route 15 & 50 (Gilbert's Corner area) when the community has questioned the impacts on this area for years?
10	Misrepresentation of impacts to surrounding communities	Residents of the Watson Rd area were very concerned about impacts with the first proposed site. Loudoun	Pictures taken during the LW balloon test indicate that the water tank will be visible at some points along	Watson Road area residents were left out when LW only released one image from Watson Rd and indicated NO

March 12, 2015

		Water only released one image from Watson Rd and indicated NO TANK VISIBILITY. However, the test balloon was clearly visible at Watson Rd and Creighton Farms Drive.	Watson Rd. It is clear that the single image used by LW for Watson Rd would not have visibility due to the location where the picture was taken.	TANK VISIBILITY, when it is not true that there is no visibility. Residents and I feel that LW has a responsibility to accurately reflect the impacts of their projects on the affected communities.
11	Misrepresentation of impacts to surrounding communities	Virtual images were never provided from Willowsford, yet the Willowsford Grant community is adjacent to the site and construction access will be through the Grant.	The Willowsford community was one of the five people notified for impact, but there were no photos of the community impact to them provided to anyone.	Why weren't virtual images from the balloon test provided for Willowsford locations? Willowsford will certainly have visual impacts yet this was not addressed in LW's analysis.
12	Eminent Domain	LW staff assured the community on several occasions (during balloon test and at a community meeting) that they would NEVER USE EMINENT DOMAIN .	At the BOS Transportation and Land Use Committee meeting, LW staff said they would use eminent domain if needed for access.	LW staff changed what they were saying about eminent domain to the residents when they came before the BOS. LW staff had previously told the Planning Commission and the BOS that they would not build on the site if they did not have access. In fact the Planning Commission made access a condition of approval.



Loudoun County, Virginia

www.loudoun.gov

Board of Supervisors

1 Harrison Street, S.E., 5th Floor, MSC #1, Leesburg, VA 20175

Telephone (703) 777-0204 • Fax (703) 777-0421 • email: bos@loudoun.gov

December 10, 2012

Loudoun Water Board of Directors
44865 Loudoun Water Way
PO Box 4000
Ashburn, VA 20146

Dear Board Members,

I would like to take this opportunity to express several concerns I have on behalf of the residents of the Blue Ridge District, namely, system-wide water rates and placement of water towers.

I was heartened to see that the Loudoun Water Board unanimously elected to reschedule the public hearing for County Sponsored Community Systems rather than take action on the proposed rates the day following your final public information session to your customers. I believe this action shows that you are serious about taking into consideration the thoughts of Loudoun Water customers. I am also relieved as this gives a chance for the customers in Willisville to participate in these discussions as I understand there were issues with notification to some of those residents.

Water Rates

The history of the communities of Willisville, St. Louis, and Howardsville go back to the civil war era and some landowners in these communities are descendants of the slaves who purchased land within these communities upon receiving their freedom. Unfortunately, the poor soils on portions of these lands are such that they are not compatible with the installation of traditional septic systems to dispose of wastewater. Together, the Board of Supervisors and Loudoun Water have stepped up to provide the citizens of Willisville and St. Louis with a healthy and safe sanitation system. I feel it is also important to acknowledge that there are still homes in Loudoun County that use privies as a means of waste disposal and that we are working with Loudoun Water to remedy this situation.

Unfortunately, there has been residential development where soils are not compatible with drainfields and in some cases, sufficient water and wastewater treatment has not been made available. I believe it to be in everyone's best interest for Loudoun Water and the Board of Supervisors to work toward a universal rate for all customers served by Loudoun Water, in perpetuity. Forcing residents on communal systems to bear the full cost of those systems when the communal system is 90% built out or if the system has more than 15 lots that will be served by the system would cause undue hardship for these Loudoun's families.

Please let me know if you would support consideration of one standard wastewater rate for all Loudoun Water users in addition to a single water rate, much like neighboring jurisdictions such as Prince William County Service Authority and Fairfax Water have instituted.

Proposed Water Towers in Willowsford

I am formally requesting that the Loudoun Water Board look at alternative locations for the two 1-million gallon water tanks that are proposed to be installed at the northernmost edge of the transition zone. I request that the water towers serving the community follow Loudoun Water's model for the Brambleton Community's water towers: place water towers in the communities they serve. The suggested placement of these towers is in the backyards of citizens who are served by well and septic and live in Loudoun's Rural Policy Area and are thus prohibited from benefitting from Loudoun Water's infrastructure.

What was clear from the Loudoun Water public input session I attended at Creighton Corner Elementary School last month, was that there are other placement options for the proposed water towers. I appeal to you to look at the land near the Willowsford cell tower which is closer to Evergreen Mill Road. It was pointed out during the meeting that a water tower was indicated on a county plan years ago.

Also, please consider the possibility of installing shorter water towers such as those on Belmont Ridge Road near Broadlands Parkway.

Lastly, I appeal to you to consider holding public information sessions earlier in the process. It was disappointing to the people that attended the hearing to find out that the feasibility study period was concluding within 24 hours of that evening's meeting: the only public information session conducted on the proposed location.

Additionally, please note that the Northern Virginia Regional Parks Authority has expressed their opposition to the sighting of the water tanks as presented at the community meeting. They have stated that the effects of the placement of the towers should be carefully considered, since it is not just the archeology of the area that will be affected by Loudoun Water's construction, but also the cultural landscape and viewshed that will affect Gilberts Corner Regional Park. This park includes historic battlefield lands and Mt. Zion Church, which is on the historic registry. The primary goal of this new parkland is to preserve the historic and scenic values of the area.

I would also like to take the opportunity to thank you for your dedicated service to our community by serving on the Loudoun Water Board and thank you for taking into consideration my requests on behalf of the communities I serve. Please do not hesitate to call or email me to further discuss these matters. I am also attaching copies of emails from citizens and stakeholders regarding the proposed water towers.

Respectfully,



Janet Clarke
Vice Chairman and Blue Ridge District Supervisor
Loudoun County Board of Supervisors
703.777.0210
janet.clarke@loudoun.gov

cc: Chairman Scott York
BOS

Attachments:
Constituent emails



Loudoun County, Virginia

www.loudoun.gov

Board of Supervisors

1 Harrison Street, S.E., P.O. Box 7000, Leesburg, VA 20177

Telephone (703) 777-0204 • Fax (703) 777-0421 • email: bos@loudoun.gov

July 9, 2014

Loudoun Water Board of Directors
44865 Loudoun Water Way
PO Box 4000
Ashburn, VA 20146

Dear Board Members,

On behalf of the residents in the immediate surrounding area on Red Hill Road, I formally request the Loudoun Water Board construct the two proposed one million gallon water storage tanks underground or on-grounded (no taller than treetops). The other alternative to consider would be to reassess the alternate locations further from the border of the Rural Policy Area. I encourage you to take your time and be mindful of the impact on the local community, as there is not a need to rush a project that does not need to begin until 2018.

Many residents have expressed a number of concerns, of which I believe you are aware. You should have received correspondence from their coalition, the "No Red Hill Water Towers". I feel their reasoning is sound on a number of points, particularly that water tanks should be placed in the communities they serve and not just where it is convenient. The proposed placement of these tanks is near the Rural Policy Area, with less than a third of the residents off Red Hill Road eligible to receive public water. The remainder are actually IN the Rural Policy Area, therefore prohibited from benefitting from Loudoun Water's infrastructure that is being proposed to be built within feet of them.

Please strongly consider on-grounding these proposed water storage tanks. I realize on-grounding them would require pumps, but other jurisdictions have taken action that reflect one size does not fit all and have installed pumps in order to accommodate some of their community needs.

To that end, recently I requested the cost associated with installing on-grounded tanks in comparison to elevated tanks from Mr. Jennings. The estimated additional project cost difference for constructing on-grounded tanks versus elevated tanks for the year 2018 is \$4,074,000, based on the information he provided. I personally do not feel that this is an amount that should prohibit building the tanks in an on-grounded fashion. The County has spent additional money on capital projects for other infrastructure to accommodate unique needs in one geographic location versus another. In my opinion, one size does not fit all and this adjustment of construction type is a respectful approach for the citizens of that community.

In closing, I would like to thank you for your dedicated service to our community by serving on the Loudoun Water Board and thank you for taking into consideration my requests on behalf of the communities I serve. Please do not hesitate to call or email me to further discuss these matters.

Respectfully,

A handwritten signature in cursive script that reads "Janet Clarke".

Janet Clarke
Blue Ridge District Supervisor
Loudoun County Board of Supervisors
703.777.0210
janet.clarke@loudoun.gov

cc: Chairman Scott York
BOS



Loudoun County, Virginia

www.loudoun.gov

Board of Supervisors

1 Harrison Street, S.E., 5th Floor, MSC #1, Leesburg, VA 20175

Telephone (703) 777-0204 • Fax (703) 777-0421 • email: bos@loudoun.gov

February 12, 2015

Loudoun Water Board of Directors
44865 Loudoun Water Way
PO Box 4000
Ashburn, VA 20146

Dear Loudoun Water Board Members,

On behalf of the many Blue Ridge District citizens affected by your recent decision to build an elevated water tower off of Red Hill Road in the 600 zone, I respectfully request that you reconsider your plans to construct that elevated 189' water tower. Building just one elevated tank versus two is not an acceptable compromise. I know you are aware that the planned site is also approximately just 1000' from the Rural Policy Area next to resident's homes which have been in Loudoun County for decades. These residents and I were very clear with your staff regarding acknowledgment of the need for the new water storage. Even though many in the community will not be Loudoun Water customers, the community came together and decided on a compromise, which did not consist of one tank but rather for the water storage to be tree height or lower. However, your staff has fought us on this option every step of the way, providing inconsistent and escalating cost estimates that do not remotely resemble that of building lower ground storage tanks in other jurisdictions, including Prince William County and Fairfax County.

With your decision to construct an elevated tank next to the Rural Policy Area, where most of the people are prohibited from benefitting from Loudoun Water's infrastructure, you are not respecting the comprehensive plan regarding the effect on the surrounding area. You have the opportunity to show that you can be a progressive water authority in keeping with the progressive County that we are, and you should respect the character of the different areas of the County. This respect for the character of the county can still be achieved by constructing the needed water storage tanks in the fashion that the community is requesting. Therefore we firmly believe there is time for you to change your decision on the type of structure you will build at this location and direct your staff to build water storage tree height or below.

As you know, the Board of Supervisors' final vote on your SPEX for the elevated water tank was a 5-4 vote, with Chairman York being that fifth vote. I remain firmly convinced that if your General Manager, Mr. Fred Jennings had not contacted Chairman York shortly before the Board's final vote in order to get the Chairman to change his vote from the Chairman's vote of denial in the Transportation and Land Use Committee, then your staff would have had to go back and plan for these lower towers. In fact, staff going back wouldn't have been prohibitive because you hold a Commission Permit for that site. We in fact, had that discussion with your staff in the Board Transportation and Land Use Committee. To that end, I feel compelled to convey to you that the information coming from your staff has not been forthcoming or fully honest. This has been a consistent problem on several Loudoun Water issues. Please keep this in mind because this chronic communication problem is not a good representation of our County water authority.

You are appointed representatives serving at the pleasure of the Board of Supervisors, but yes, with largely separate authority from the Board once we appoint you. I personally appreciate your willingness to serve and respect our differences, but feel that in my elected Board position I have a responsibility to represent what the majority of the directly impacted community requests. So please remember that no one disputes the need for the water storage, only the type of structure you should build. Respecting that acknowledgement of the need I ask that you be sensitive to

county citizens in how you construct the water storage on Red Hill Road. In doing so you now have the ability to make a groundbreaking decision to change your mind in allowing your staff to build elevated tanks in the Transition Policy Area and further direct Loudoun Water staff to build this and any future water storage tanks in the Transition Policy Area at tree height or lower. This would be a monumental shift from status quo operations to the next level of operations and speak well of your Board's actions, particularly in light of Loudoun Water's current community issues primarily stemming from actions by Loudoun Water staff with Raspberry Falls, Selma, community systems, the handling of Beaverdam Reservoir, and the Red Hill water towers.

Once again thank you for your willingness to serve on the Loudoun Water Board and for listening. With all things considered, please think about my request on behalf of the communities we serve and provide me with notification in writing as to what you decide to do so I can convey that information to the constituents in the Blue Ridge District, which is the community affected by the type of water storage structure you decide to build.

Please do not hesitate to call or email me to further discuss these matters. I have also included some additional information for your review in your consideration.

Respectfully,



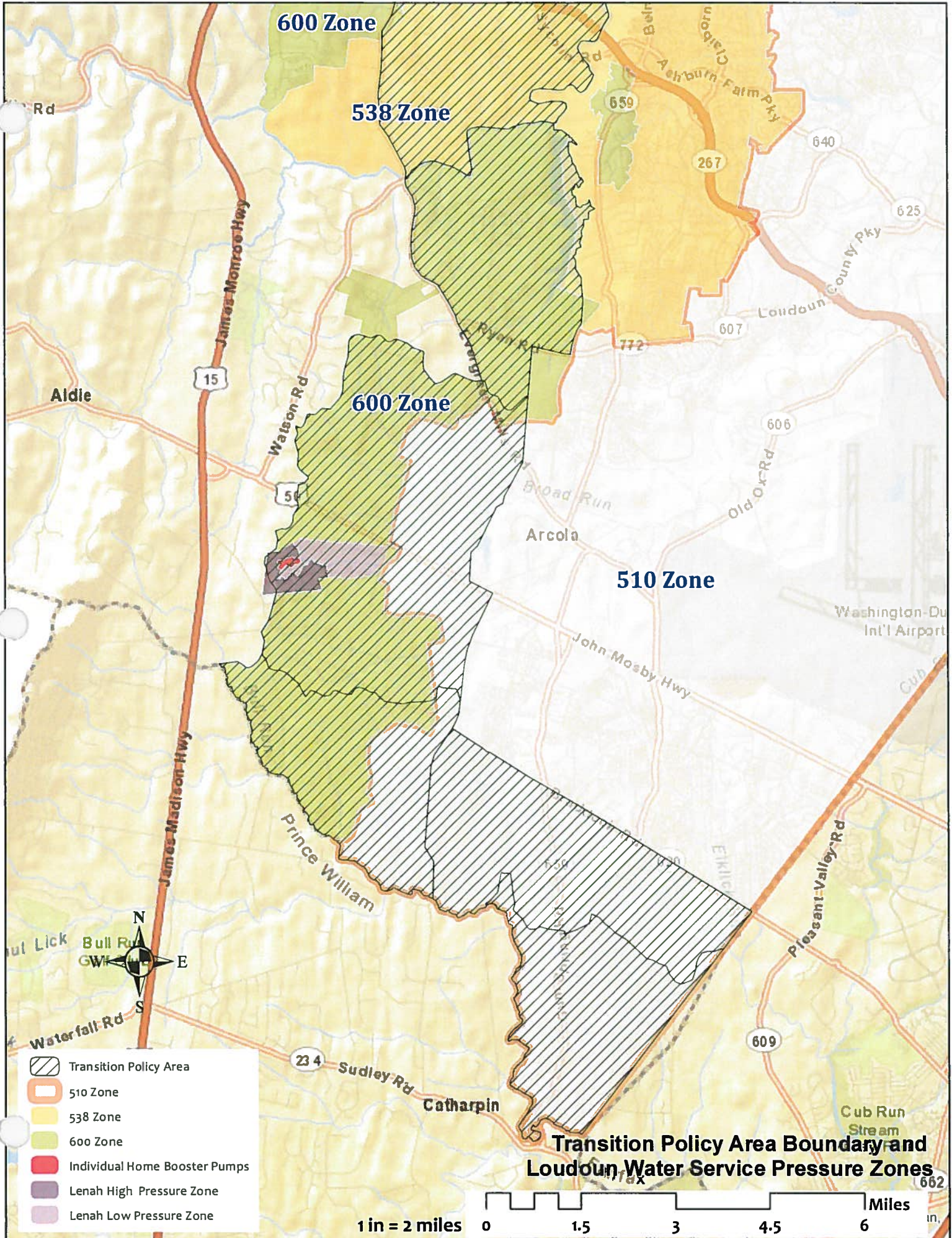
Janet Clarke
Blue Ridge District Supervisor
703.777.0210
janet.clarke@loudoun.gov

**LW Staff Quote from Board of Supervisor's
Transportation and Land Use Committee Meeting (October 17, 2014)**

TLUC – Oct 17, 2014

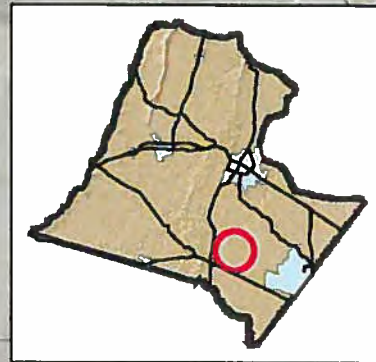
(from www.loudoun.gov Board of Supervisors meetings)

Mark Peterson – What would we do if this isn't approved? In terms of what the application asks for Plan B, would we look at that alternative with the ground storage? You know, we would have to take another look at that. Would we try to step back to screening and look at other sites, as we showed the options are limited but that's what we would have to do.



Transition Policy Area Boundary and Loudoun Water Service Pressure Zones

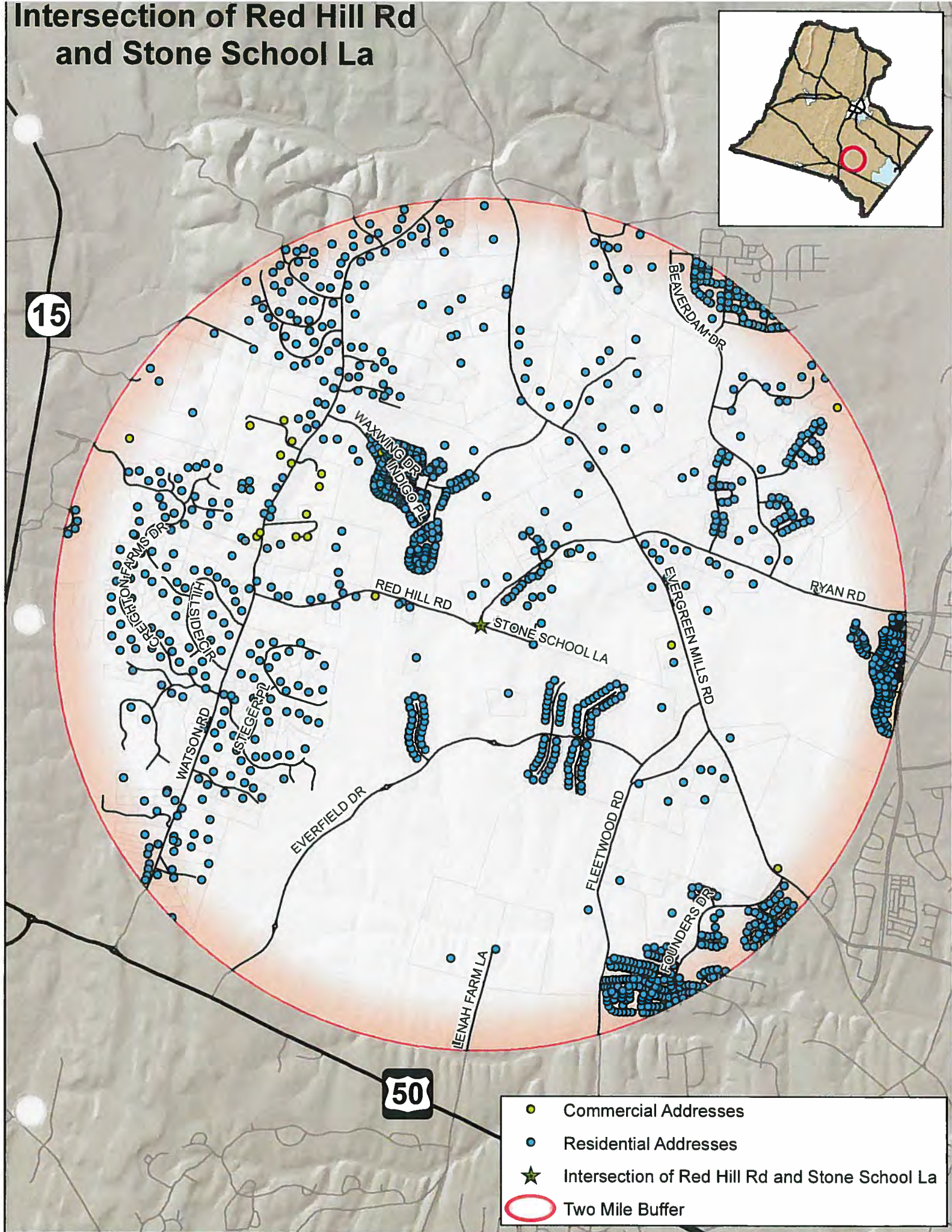
Intersection of Red Hill Rd and Stone School La



15

50

- Commercial Addresses
- Residential Addresses
- ★ Intersection of Red Hill Rd and Stone School La
- Two Mile Buffer



DULLES SOUTH ELEVATED WATER TANK SITING STUDY

PUBLIC PARTICIPATION PROGRAM

Program included:

- Citizen Advisory Committee
- Briefings to HOA's (provide information & provide opportunity for issues to be heard)
- Bill stuffers
- Direct mail
- Media relations: Articles to announce project and balloon testing
- Web page and dedicated email address
- Hotline with voicemail box to receive stakeholder input or concerns
- Mailer to 6,000 within 2 mile radius of sites being studied & asking for volunteers
- Mailer to 7,000 homes within 2 mile radius of selected site (announced balloon testing)
- Bill stuffer featured articles about the project for three quarters
- LCSA met face to face with concerned resident individually to describe the project and address his concerns.
- Visual assessment used a RED balloon

Section 6 PUBLIC PARTICIPATION PROGRAM

6.1 PUBLIC PARTICIPATION PLAN

LCSA prepared a public outreach plan which identified the audience, goals and objectives, strategies, themes and messages, and timeline for a public participation program for the Dulles South Tanks. The complete plan is provided in Appendix B. This plan was followed in developing public participation activities for the project. The major campaign strategies employed were as follows:

- **Face-to Face Interaction** – reach landowners, residents, and County officials; actions include formation of a Citizen Advisory Committee (CAC), participation in information meetings, public hearings and assistance from the fire department.
- **Information Outreach** – conduct in a variety of forms, including direct mail, website, email address, and hotline.
- **Media Relations** – provide information through the local media (Times Mirror, Leesburg Today, Connection and Loudoun Sections of Washington Post).

The programs conducted to implement these strategies are discussed in the remainder of this section.

6.2 PROGRAM DESCRIPTION

LCSA's bill stuffer was used to initially introduce the project. No feedback was received from customers as a result of the initial bill stuffer information. LCSA created a web page at its website (and intranet site for staff), set up a dedicated email address (dstanks@lcsa.org) which was listed in the direct mail materials, and created a hotline with voicemail box to receive stakeholder input or concerns about the project.

Then, in September 2005, a mailer was sent to the approximately 6,000 homes within a two mile radius of the sites identified in the Layer 1 screening. The mailer called for volunteers to serve on a Citizen's Advisory Committee (CAC) for the project. It also listed the email and web outlets for comments on the project. Eighteen people responded to the CAC request.

6.2.1 CAC

The CAC provided a long-term opportunity for interested citizens to develop an understanding of complex and potentially contentious issues, and also provided an

Dulles South Elevated Water Tank Siting Study

important source of input and feedback for LCSA. The first CAC meeting was held on October 19, 2005 from 6:30 to 8:45 pm. Twelve community members attended. LCSA and Hazen and Sawyer introduced the project and basic concepts of water distribution system design. The Layer 1 Criteria (see Section 4.1) and the sites initially identified were presented and discussed. Following the meeting, LCSA distributed meeting minutes and the Layer 2 criteria (Table 4-3) to the CAC, and the CAC was asked to provide input regarding the criteria themselves, as well as weighting and scoring of the sites.

The second CAC meeting was held on November 16, 2006 from 6:30 to 8:00 pm. Nine community members attended, and two members who did not attend provided their completed Layer 2 tables by email. Six CAC members completed Table 4-3 on their own prior to the meeting. Hazen and Sawyer discussed each Layer 2 criterion with the group and developed the consensus weighting table (Table 4-4) in a live, interactive format with the CAC during the meeting. The results indicated that Site A, Stone Ridge, was the preferred site.

Complete meeting materials from both meetings, including agenda, exhibits, and minutes, are provided in Appendix B.

6.2.2 Additional Face-to-Face Efforts

LCSA attended several public informational meetings throughout the project (HOAs, etc.). These forums provided an opportunity for LCSA to present information regarding the project in a consistent manner to large groups of stakeholders, while at the same time, providing them the opportunity to have their issues heard. LCSA and Hazen and Sawyer developed talking points and visual aides used for these meetings.

6.2.3 Information Outreach

Two direct mailings were done: the initial brochure announcing the project and recruiting CAC volunteers in September 2005, and a follow-up postcard mailer sent in August 2006 to the approximately 7,000 homes within a two mile radius of the selected site.

The LCSA bill stuffer has featured articles about this project in three of the last five quarters since September 2005, and periodic articles will continue to be included through project completion. Direct mail will also be used (in the form of letters to CAC members and other stakeholders through HOAs and other means), to keep them abreast of progress throughout the project.

LCSA continues to keep an updated web page for the project on its website (<http://www.lcsa.org/dullessouthtanks.cfm>), and this page will continue to be maintained throughout the project.

Dulles South Elevated Water Tank Siting Study

6.2.4 Media Relations

An article in the *Loudoun Times Mirror* announced the project, and a second *Loudoun Times Mirror* article was utilized to provide an update and announce the visual impact assessment (balloon testing).

6.2.5 Visual Impact Assessment

Following the selection of Site A and development of a preliminary site plan to locate the proposed tanks on the site, a visual impact assessment was conducted to give residents an opportunity to view the location and elevation of the proposed tanks.

In August 2006, the visual impact assessment was announced in a follow-up mailing sent to the approximately 7,000 homes within a two mile radius of the selected site. It was also announced in a *Loudoun Times Mirror* article, and via email to the CAC and the South Riding Strategic Planning Committee, a community group within the South Riding development. The mailing generated one response from a resident on Goshen Rd. who had not previously commented or been involved in the CAC. LCSA subsequently met with the resident individually to describe the project and address his concerns.

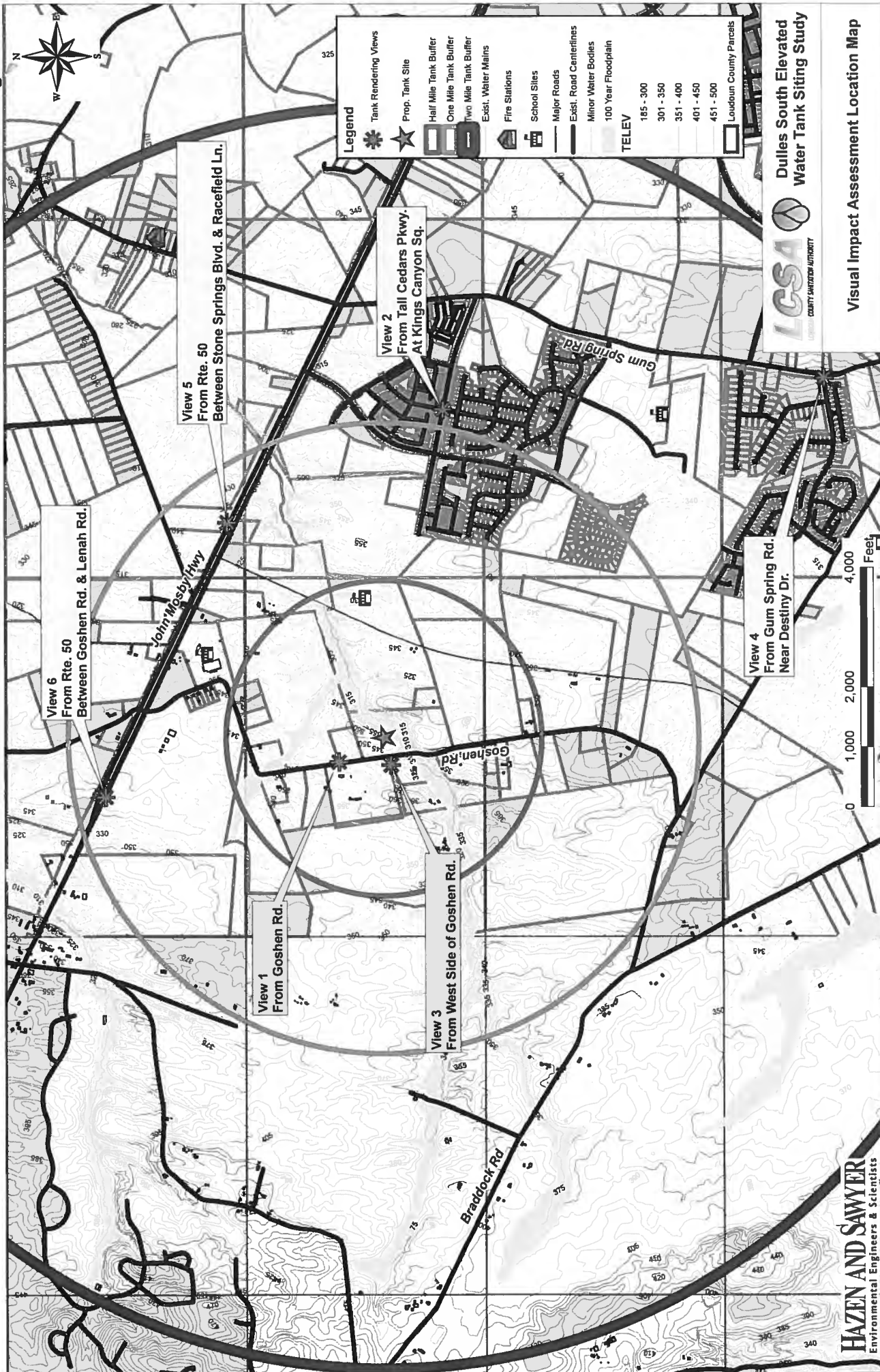
The visual impact assessment was conducted on September 9, 2006 using a 6 ft. diameter red helium balloon, which was flown from about 11:00 am to 3:30 pm at approximately the center of the southernmost tank, as indicated by the star in Figure 6-1 and shown in more detail in Figure 6-2. Figure 6-1 shows the area in which observations of the balloon were made.

The balloon was visible on Goshen Rd. only in immediate vicinity of the site, and even from adjacent lots, the existing tree cover on the site provided significant screening. It was difficult to see the balloon from Rte. 50 due to vegetation and power lines along the roadway and between the road and the tank site. The balloon was visible along the entire existing length of Tall Cedars Pkwy., and more distantly visible from Gum Spring Rd. It was not observed in Lenah Farm, from Lenah Rd., or from Braddock Rd.

Renderings of the proposed tanks as seen from the six viewpoints shown in Figure 6-1 were created using photographs taken during the visual impact assessment. The complete renderings, showing one, two, or three tanks from each viewpoint (except in cases where the second or third tanks were not visible from a particular viewpoint) are shown in Figures 6-3 through 6-17.

Figures 6-3, 6-4, 6-5, and 6-9 illustrate the amount of screening provided by the existing vegetation on the site, as viewed from Goshen Rd. immediately north and west of the site. Figure 6-9 illustrates the proposed entrance drive, which is curved to limit the visibility of the tanks from Goshen Rd.

Figure 6-1



Dulles South Elevated Water Tank Siting Study

Figures 6-6, 6-7, and 6-8 demonstrate that the tanks will be clearly visible from Tall Cedars Pkwy. The tanks are much more difficult to see from Gum Spring Rd. (Figures 6-10 and 6-11) and Rte. 50 (Figures 6-12 through 6-17).

6.3 PROGRAM CONCLUSIONS

LCSA has made a wide range of efforts to inform and involve the community in the Dulles South tank siting, through face-to-face contact with the CAC and other groups, information outreach using a variety of methods, and use of local media outlets. The conclusions of the layered screening process conducted with the CAC became the final site recommendation.

Overall, the visual impact of the tanks is relatively low, due to the topography and vegetation of the area and the presence of other tall features (overhead power lines, etc.). The addition of a second or third tank did not significantly add to the visual impact.

NO 600 ZONE PUBLIC PARTICIPATION DOCUMENT

ELEVATED WATER STORAGE VS GROUND WATER STORAGE

Elevated Water Storage Disadvantages

- As water distribution systems change, evolve and/or expand, hydraulic demand may change so stagnation can occur, the tank could drain quickly, or the hydraulic grade line could change making the tank obsolete
- More susceptible to freezing
- Appearance / NIMBY / Public Relations
- During rehabilitation of an elevated storage tank, the tank must be taken offline for service

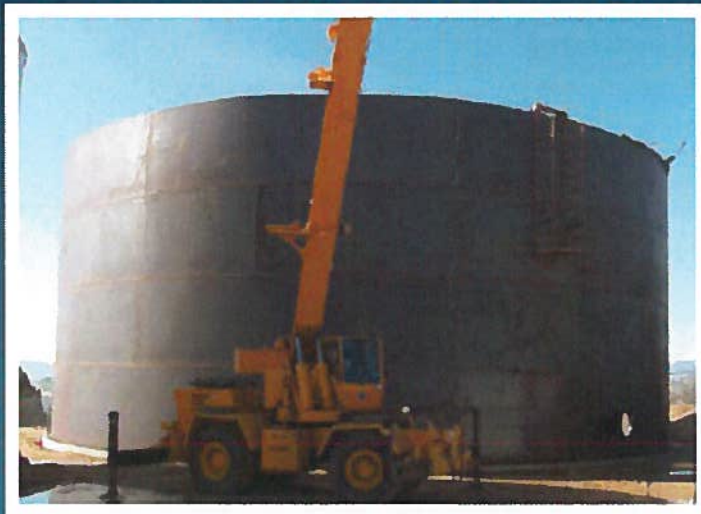
Elevated Water Storage Disadvantages

- During rehabilitation of an elevated storage tank, the tank must be taken offline for service



Ground Water Storage Advantages

- Variable speed pumps can change pressure range



Ground Water Storage Advantages

- Can adapt to changing hydraulic needs
 - ❖ With the ability to change impellers on a motor, employ VFD's, and/or change out a pump for a larger pump, ground storage may provide an owner with increased flexibility.
 - ❖ This allows owners to more readily respond to changing system demands.





Matrix Evaluation

- Capital Costs
- O & M Costs
- Life Cycle Costs
- Appearance / NIMBY / Public Relations
- Permitting Time / Issues
- System Compatibility / Pressure Control / Flexibility / Future System Upgrades
- Environmental Impacts
- Water Quality
- Land Availability
- Potential for Freezing
- Seismic Considerations
- Energy Costs
- Owner Preference / Experience
- Topography / Terrain
- Tank Size / Shape

Loudoun Water Board Meeting – February 12, 2015
Total recording length: 1:46:02

Agenda Item 6A – Award of Design Task Order – 600 Zone Water Storage Tank
Time on recording - 1:24:40

Chairman Rocca – Now this was put on Action because Mark recusing himself from the vote for a conflict. However I would like to propose to the Board that this item be tabled until our next fiscal year. Ok

Koblos - When is that

Rocca - Next year, next year

? - So the effect of that would be nothing happens

Rocca – that's it, I wanna table it

? - and that doesn't affect water....

Rocca – No - We will own the land. It doesn't affect anything. Just , I wanna table it and let it, staff to relook at things & see where we can go from there. But right now I would like to table the design until next year.

Koblos – Can we say anything?

Rocca - Believe me my friend if I said no to that I think they'd be shooting me against this wall.

Koblos - I can honestly say I am totally against the tall tank.
I know Hobie wanted to say the same thing.

Rocca - I don't want the Board to go to - there's issues. There's \$12 million in vagrant money.

Koblos – I understand. I have been on this thing for 5 years.

Rocca - People have the idea that we have surplus money but we don't have surplus money. It's contracts that didn't get completed that are going to get completed. The funds just haven't been sent out yet. So I would like to table this and I would entertain a motion if somebody will give me that motion.

Koblos – Well let's wait till Hobie gets here.

? – Waiting for Hobie

Rocca – We are going to have discussion, it doesn't finish here. I wanna see if two people support it.

? - Could you restate the motion.

Rocca - I just want to table this issue until next year. Give staff a chance to look at this thing again and see where we are going to go. We don't need it right now. It doesn't have to be done. It is not an emergency. So I would like it tabled.

? – When you say next year, are you talking about January of next year.

Rocca – Yes or whenever we get it into our schedule. They've got some work to do on this thing. I don't wanna be pushing on them. I want them to get all the right information.

? – Ok, so I move that we table this award of the design for those tanks until next year

Mitchell – If we don't, just as a point of clarification,

Rocca – Well I've got a motion, I would like either a second or let it die

? – second

Rocca – Now we can talk about it.

Mitchell – If, as a, I don't know if it needs an amendment or something else, but if we decide on a different path, and we decide to go forward with that path prior to the next year, we could still do that or do we bring it up as a discussion again. So if during the course of between now and later on let's say next 6 months, we come up with a alternative to what is being planned right now and what was approved, we could still bring it up prior to next year.

Rak – Mr. Chairman, so the item on the agenda is the award of the design task order. So as I understand the motion, the Board is moving to table a decision on awarding the design task order.

Rocca - Correct

Mitchell – on the tall one?

Rocca – Period. I want this thing to go to next year. Ok, that is basically what I am asking of the Board is to table this thing until next year.

? – Mr. Chairman, are you also directing staff to come back with alternatives or are you not doing any of that.

Long pause – no speaking

Rocca – What did we talk about. No just – its nothing to do. We've got alot of stuff there, we've got financial issues to look at. There's things that just need to be....I get the feeling this thing is being rushed into. We don't have to have it till 18 or 17 or whenever and I just want to table this thing

? - Does the approval expire?

Rocca – nope

Jennings – No, however, we would like direction from the Board. Our option to procure the land comes due in July

Rak – The current contract with Mr. Rouse requires that the closing occur by July of this year.

Mitchell – And that is irrespective of any designs or anything else.

Rak – That doesn't have anything to do with the design of the tank. It would just be the acquisition of the property.

Mitchell – But you are still going to move forward with the closing on the property.

Rocca – Yes, cause we could put a cell phone tower up there if we wanted to.

Mitchell – So what we are tabling for one year is the design only.

Rocca - Just tabling the design on this thing for a year.

? - So staff won't be doing any work on it?

Rocca – Well, see what other options may be available. Maybe there's other options besides underground (?) tank. We've got a \$12 million pipeline we have to put in if we go with underground tank or below grade, below height tank. Let's call it that., and that is a \$12 million option. That's a lot of money and I just wanna, I wanna

Whitmore – Johnny, you can't put a cell tower up there.

Rocca – I was only kidding

Whitmore – Well, for the record.

Rocca – For the record, I was kidding.

Whitmore – Got ya

Rocca - We can put up a tennis court

(Chatter)

Mitchell – As a friendly amendment – that we can table the designs of it until next year. However, I would like to have a better understanding of the ground alternative that we have been hearing about

Rocca – That is what the tabling is. You can ask staff for anything you want. But right now, I just want to table the design of this thing until next year.

? - Is it possible that getting this piece of property won't be suitable for whatever alternative we come up with? Are we wasting money getting the property?

Rocca –It's 5 acres

Jennings – It is possible.

Rocca -It is 5 acres and a very marketable piece of property.

Mitchell – So irrespective of whatever ultimately might be constructed, whether it is inground, above ground, or really above ground, then the property is still the right spot ?

Jennings – That is...excuse me if I might. The. What staff has compiled to this point is, and we are available at any time – we could do it at the next Board meeting or workshop however you would like is to explain the entire process that supports this existing application for an elevated tank. We also before the Board did a fairly extensive review of what the impact was for putting an elevated not a tall tank but an at grade tank . We have never looked at a below ground tank.

? – I understand that. My interest is more about at ground.

Jennnings – Our review is this site has always been evaluated for an elevated tank. If we were not to go with the elevated option I can't say it's the best site. We may would have preferred to put it elsewhere.

? – Ok

? – I think that is part of the reasons why

Jennings - Not to mis-speak and I'll leave it to Mike. It is doable but may not be the optimal site. That is what I am told.

Koblos – We are not voting on buying the site today, right?

Jennings – We have time.

Koblos – That is what I am saying. We can get back from staff information before we actually say ok. We have till July to vote on the site.

Rak –that is correct, that is correct

Rocca – So all I am asking is

Mitchell – putting off the design, off the table for a year. I can understand but I would like to get some information during this time.

Rocca – Feel free, come to

? – Given that this is our 2nd crack at it, we had another site that we abandoned or whatever went away from, and this is our second crack at it and you know I think it's; there is a lot of information floating around and in fairness to our newer members and so forth, I think they need to hear the positives/negatives of above ground, at grade and so forth, costs and so forth because as was said earlier, we're kind of at a inflection point if you go to a more expensive option that may be what you are locked into for the future so we wanna , so personally I wanna understand it to be sure where we are at this point. How many other towers must be built or tanks above ground at grade or whatever.

Rocca – Alright, Hobie

Mitchell – Sorry I ask a lot of questions. By the time we have to close on this property, we should have probably a pretty good understanding of the technical solutions and the cost for that solution prior to closing.

Rocca – And there's are a lot of other factors that have come to bear on this, Lenah, there is all kinds of things that are going to impact this that you guys don't know about. So I want you to be aware of what they are and how it is going to impact this thing, so by tabling this thing ...you know, we can have time to look at this and restudy our situation, rethink our position. See if we are in the right barn.

? - Lets call the question or table it

Rocca – I have a motion to call for the vote.

Those in favor of tabling this motion – signify by saying Aye.

Rocca – Those opposed.....let the record show that it was unanimous (approval).

Jennings – May I clarify one thing Mr. Chairman. To Mr. Mitchell's point, staff has, we have done a lot of that work you are describing, this has been pretty heavily vetted in public forums. So at any point that you would like us to provide that background and detail, we are more than willing to setup, it will take a little bit of time to go through – we are happy to.

Mitchell – But the commission permit that is approved.....allow us to do any of the two alternatives that we have that is above ground?

Rak – yes

Mitchell – Ok

Rocca – My computer just updated. I'm telling you. Alright boys and girls, thank you very much for that. I know I sprung it on you but I've been just

? – good spring - cause I'm not sure I would've voted for it

Roccca – just thinking that , you know

? – I am glad the explanation

Rocca – Well, I've been laboring over this thing for quite awhile and I just didn't think that we had covered all our bases in being thorough in what we are doing. Johnny has still apologized for trying to cut you off.

? – Chairman Rocca if I could just get some clarification. We are going to need to bring an informational item back to the CIP committee prior to the July date of an anticipated closing. So

Rocca – You guys do in house what you gotta do.

? – So we will bring an informational item back in May or June to the CIP committee to discuss whatever you want to talk about, will be glad to do that. I do want to say one thing for the record, is that Mark Peterson and Tom Lipinski – put a lot of effort into the commission permit, special exception and I have to say that I know that folks out there don't always like what we have to say and we understand that but the two of them conducted themselves with extremely high integrity & transparency and I am very comfortable and proud of the work that they did. The information is all there and I will be glad to discuss any of it with you.

Rocca - Thank you. We appreciate that. We recognize the hard work you guys put in and that is why this company has some of the best and most talented people in the

business and but sometimes this Board needs to take a step backwards so that we can see what kind of air we are breathing and what kind of water we are selling. So that is why I just couldn't in good conscience keep pressing and pressing this thing. But let it sit and we will talk about it next year. In the meantime, you guys continue to do your jobs and there is no question about that.

1:38:00 Next item

LOUDOUN WATER

44865 Loudoun Water Way • P.O. Box 4000 • Ashburn, Virginia 20146
www.loudounwater.org

Minutes of the Loudoun Water Board Meeting, February 12, 2015 *All materials are available in BoardDocs, or from the Board Secretary.*

The Board Meeting was held at 3:00 pm in the Boardroom of the Loudoun Water building located at 44865 Loudoun Water Way, Ashburn, Virginia.

Board Members:

Chairman Johnny Rocca	Vice Chairman Shaun Kelley	Hobie Mitchel
Terrence Allen	Mark Koblos	Martin Sultan
Bill Byers	Charles McKinney	John Whitmore

General Counsel –Jonathan Rak – McGuire Woods
--

Loudoun Water Executive Staff in Attendance:

Fred Jennings-Chief Executive / Treasurer	Jewell Lilly-Board Secretary
Mary Arnsbarger-Exec Dir Corp Services	Tom Broderick-Exec Dir Legislation & Regulation
Carla Burleson-Exec Dir Finance	Charles Logue – Exec Dir Production
Mike Latham-Exec Dir Planning & Eng	Mark Peterson-Exec Dir Stakeholder Relations

AGENDA ITEM 1 – CALL TO ORDER

The meeting was called to order by Chairman Rocca at 3:00 pm.

AGENDA ITEM 2 – GENERAL MATTERS

2A. Approval of Minutes – January 08, 2015

Upon **MOTION** of Mr. Koblos, second by Mr. Kelley, minutes of the January 08, 2015 meeting were approved as presented. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Absent for the Vote, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

2B. Approval of Minutes – Raspberry Falls Workshop – January 30, 2015

Upon **MOTION** of Mr. Byers, second by Mr. McKinney, minutes of the January 30, 2015 meeting were approved as presented. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Absent for the Vote, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

2B. Approval of Minutes – Special Meeting – February 09, 2015

Upon **MOTION** of Mr. Kelley, second by Mr. Byers, minutes of the February 09, 2015 meeting were approved as presented. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Absent for the Vote, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

2B. Board Member Comments

- The Board waived the comment period due to the large number of public speakers in attendance.

(Mr. Mitchel arrived at this point in the meeting)

2D. Public Speakers (comments by public speakers are provided as a summary and are not intended as a verbatim record.)

- The following individuals signed up to speak to their concerns on Raspberry Falls/Selma: Scott Lutz, Christian Hoff, Cindy Klebonis, Laura Maschler, Holly Krauss, Dallas Nash, Tryn Stimart, Fred McCusker, Greg Harrison, Susan Jacks, Tom Morrow, John Suttle, Rober LeBlanc, Linda Hall, Marcia Carlyn, Keith Hull, Marybeth Butler. Some of the individuals later waived their option to speak.
- Chairman Rocca asked Legal Counsel to read a synopsis of the minutes of the January 30, 2015 Raspberry Falls Workshop conducted by the Board. Legal Counsel stated the following: "There are no items on today's agenda that are specific to the Raspberry Falls system, however, at the Board's workshop on Friday, January 30, 2015 The Board did vote to direct the Chief Executive and staff to come back to the Board with community input on the membrane treatment plant, all potential funding sources and an analysis of the amounts and impact to each potential party to include Loudoun Water and Loudoun County. The general consensus was that Loudoun Water did not want to burden the community system residents with the financial responsibility for the premature failure of the water system." Legal Counsel opined the staff's understanding of this consensus as a motion that the proposals to come back to the Board should not include having the community systems customers contribute toward the capital cost of replacing the system.
- Chairman Rocca summarized "The Loudoun Water Board is not looking to the residents of Selma or Raspberry to bear any of the costs of this plant, this consensus was by unanimous vote of the members present at the January 30, 2015 meeting and when staff brings the report back it will not include any remuneration from the residents of Selma and Raspberry."
- Mr. Mitchel clarified that the Board voted for "Option B" which provided all potable water and minimized the disruption to residential property.
- The following individuals spoke against tall towers and asked the Board to consider other options for the Red Hills Tanks: Ashley Zivello and Chris Vasko.
- Supervisor Janet Clarke expressed appreciation for the Raspberry Falls/Selma decision although not in her district. Today she is speaking on behalf of Red Hills residents in her district. She read a letter and provided a notebook of information regarding the Red Hills elevated water tower. She requested the Board reconsider plans to build the tanks and recommended tanks at tree level or below. The need for water storage is not being disputed, only the type of structure being built. Ms. Clarke requested notifications in writing to enable her to communicate with her constituents in the Blue Ridge District on the decision. Also requested the Loudoun Water Board look into the possibility of universal rates.
- Stacy Carey spoke on behalf of Supervisor Geary Higgins, stating that one of his primary focuses has been Raspberry Falls/Selma and expressed appreciation for the decision not to financially burden the residents. Thanked the Board and offered future assistance.

- Janet Clarke stated that Supervisor Higgins would like to see the communications between the two Boards improved.
- Ms. Clarke requested a letter from Chairman Rocca stating the action taken by the Loudoun Water Board at the January 30, 2015 meeting.
- Ms. Clarke requested a written response with the decision on Red Hills to be communicated to her office and the Board of Supervisors.

2E. Chief Executive's Report

- This week staff kicked off the Department of Homeland Security's regional resiliency program which examines impact and determines service interruption, especially important in our area due to the data centers.
- Provided an update on the 2015 General Assembly. Staff is tracking any legislation relevant to our industry.
- Staff will be hosting Fairfax Water on a tour of PWSP tomorrow.
- Thursday, February 19, 2015 Loudoun Water will be hosting Design Build Institute of America which will include our peers in the industry.
- Also on Thursday February 19, 2015 at 7:00 pm we will hold the first Raspberry Falls/Selma stakeholders group meeting.
- The Goose Creek Water Treatment Plant celebrates the one year anniversary of being owned by Loudoun Water on Monday, February 23, 2015.

AGENDA ITEM 3 – AMENDMENT/ADOPTION OF AGENDA

Upon **MOTION** of Mr. Koblos, second by Mr. Kelley, the Agenda was adopted as presented. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Absent for the Vote, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

AGENDA ITEM 4 – BOARD COMMITTEE ACTION

- Chairs of each Committee reported out on Committee activity.
- Chairman Rocca stated for the record that he was in attendance at the CIP Meeting.

AGENDA ITEM 5 – CONSENT AGENDA

Upon **MOTION** of Mr. Koblos, second by Mr. Byers, the Board approved the following Consent Agenda items. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Absent for the vote, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

5A. Fairfax Water Agreement #6 by Mike Latham

Loudoun Water has several Water Service Agreements (WSA) with Fairfax Water for the purchase of capacity from Fairfax Water and delivery of finished water to Loudoun Water. A brief history of those agreements is listed below:

- WSA #1 (1972): Mutual assistance; emergency backup in Sterling/Herndon
- WSA #2 (1989): Purchased 10 MGD treatment capacity with option to purchase additional 10 MGD capacity; Purchased 15 MGD transmission capacity from future Corbalis to Rt 50/Rt 28 intersection; Purchased capacity at Jennings-Randolph Reservoir
- WSA #2 Amendment #1 (1992): Allowed for pre-payment of capacity
- WSA #2 Amendment #2 (1993): Exercised option for additional 5 MGD treatment capacity
- WSA #3 (1994): Purchased transmission capacity from Rt 50/Rt 28 intersection to Loudoun County line
- WSA #4 (1999): Agreed to pay 2.38% of Griffith WTP costs; Total treatment capacity: 20 MGD
- WSA #5 (2004): Purchased an additional 20 MGD treatment capacity with an option for an additional 10 MGD; Purchased additional 10 MGD of transmission capacity from Corbalis to Fox Mill PS
- WSA #5 Amendment #1 (2005): Exercised option of additional 10 MGD (total treatment capacity: 50 MGD);

This WSA #6 purchases an additional 10 MGD of transmission capacity from the Fox Mill Pumping Station to the Rt 50/Rt 28 interchange and 10 MGD of transmission capacity from the Rt 50/Rt 28 interchange to the Loudoun County line. The agreement also acknowledges that Loudoun Water has undertaken several water storage construction projects, including the Dulles South Tanks, which satisfy the intent of water storage requirements from WSA #3.

The Board authorized the Chief Executive to enter into Fairfax Water Service Agreement #6.

5B. Award of Construction Contract – Broad Run WRF Septage Receiving Facility Improvements by Alton Echols

Loudoun Water operates a Septage Receiving Facility (SRF) on the northwest corner of the Broad Run WRF site. Septage haulers dispose of septic tank waste from within Loudoun County and biosolids from the community systems plants owned and operated by Loudoun Water at the SRF. Debris contained within the septage and biosolids disposed at the SRF is problematic and different than anticipated during design, which results in frequent clogging of the equipment, extensive downtime for repairs, and safety concerns. In 2014, the Board awarded a task order to Black & Veatch Corporation (B&V) to design process improvements for the facility. B&V completed the design in Q4 2014. The project was advertised for bid on December 1, 2014. On January 9, 2015, Loudoun Water received six bids as shown in the table below.

Bid Results	
Bidder	Bid
American Contracting & Environmental (ACE) Services, Inc.	\$757,000
Clark Construction Group, LLC	\$845,000
FLBE, Inc.	\$852,603
CPP Construction Company, Inc.	\$885,000
Norair Engineering Corp.	\$887,860
FJ Industrial, LLC	\$1,108,870
Engineer's Opinion of Probable Construction Cost	\$753,280

Staff has reviewed ACE's bid, and has determined that the bid is responsive. ACE has performed multiple projects for Loudoun Water and their work has been satisfactory. ACE is currently completing work on the GCWTF Raw Water Pump Station I&C Upgrades project, and the Beaverdam Creek Reservoir Inlet Control Tower Gate Valve Replacement project. As such, staff has determined that ACE is a responsible bidder.

The Board approved award of the Broad Run WRF Septage Receiving Facility Improvements to American Contracting & Environmental Services for \$757,000 with an approximate ten percent contingency to be controlled by the Chief Executive, for a total authorized budget of \$833,000. Additional costs will require Board approval.

5C. Award of Construction Contract – S3 Water Reuse Main by Alton Echols

The S3 Water Reuse Main project consists of 11,000 LF of 16-inch diameter reclaimed water main and completes the planned southern loop of Loudoun Water's reuse water transmission system. The project is critical in the respect that it will improve operational flexibility and redundancy of the system and will allow Loudoun Water to extend reclaimed water service to several additional data centers proposed along the alignment. Design of the project was completed by Urban, Ltd. and easement acquisition was completed by staff. All easements were negotiated at no cost. The project was advertised for bid on December 12, 2014. On January 12, 2015, Loudoun Water received seven bids as shown in the table below.

Bid Results	
Bidder	Bid
Ricky L. Brown, Inc.	\$2,110,000
Corinthian Contractors, Inc.	\$2,699,000
Garney Companies, Inc.	\$2,797,269
William A Hazel, Inc.	\$3,129,800
Sagres Construction Corporation	\$3,347,000
A&M Concrete Corporation	\$4,087,100
Underground Contractors, Inc.	\$5,061,000
Engineer's Opinion of Probable Construction Cost	\$3,933,600

Staff has reviewed Rick L Brown's bid, and has determined that the bid is responsive. Ricky L. Brown provided several references for projects of similar size and scope. Staff contacted the references and has determined that Ricky L. Brown is a responsible bidder.

The Board approved award of the S3 Water Reuse Main project to Ricky L. Brown, Inc. for \$2,110,000 with an approximate five percent contingency to be controlled by the Chief Executive, for a total authorized budget of \$2,216,000. Additional costs will require Board approval.

AGENDA ITEM 6 – ACTION AGENDA

6A. Award of design Task Order – 600 Zone Water Storage Tank by Alton Echols

In order to meet the potable water needs of a growing customer base in the western portion of the Central Service Area, Loudoun Water has been planning for design and construction of a 600 Zone water storage tank. The planning process required several Loudoun County development permits including a Commission Permit, Special Exception, and Minor Special Exception, which culminated with Loudoun County Board of Supervisors approval on November 5, 2014. The permitted tank will be a 189-foot tall spheroid shape with a 1 million gallon nominal capacity.

An engineering design task order will be required for final design of the 600 Zone Water Storage Tank project, which will include tank design, site design associated with the tank and access road, geotechnical investigations, and federal, state and local permitting. Staff has selected CH2M HILL to perform the work and a task order has been prepared in the amount of \$255,327. The 2015 CIP Spending Plan contains \$940,000 that includes the design work as well as property acquisition. CH2M HILL is highly qualified and the firm has an extensive portfolio of similar projects. Most recently, CH2M HILL completed the design of Loudoun Water's Reclaimed Water Pump Station and Storage Tanks at the Broad Run WRF.

Staff recommended the Board approve award of a design task order for the 600 Zone Water Storage Tank project to CH2M HILL for \$255,327 with an approximate ten percent contingency to be controlled by the Chief Executive, for a total authorized budget of \$280,900. Additional costs will require Board approval.

Chairman Rocca requested the Board table this item until next year.

Upon **MOTION** of Mr. Kelley, second by Mr. Mitchel, the Board tabled the design task order for the 600 Zone Water Storage Tank. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Aye, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

6B. Resolution of Appreciation for Pravin Gandhi by Chairman Rocca

RESOLUTION OF APPRECIATION FOR

Pravin Gandhi

WHEREAS, Mr. Gandhi was appointed to the Loudoun Water Board in January of 2011, and served with distinction tirelessly and continuously through January 2015;

WHEREAS, Mr. Gandhi served on the Audit, Personnel-Nominating and Finance Committee and consistently participated in other committee meetings and workshops, providing important contributions and leadership; and chaired the Ad Hoc Path Forward Committee during a period of significant growth and accomplishments at Loudoun Water;

WHEREAS, Mr. Gandhi provided unique contributions and unprecedented expertise in the information technology industry, as well as his depth of knowledge, sound advice and expertise to staff and the board during Loudoun Water's SAP implementation.

NOW, THEREFORE, BE IT RESOLVED, that Loudoun Water's members and staff express to Mr. Gandhi their deepest appreciation for his leadership and service; for the devotion he has so generously, effectively and graciously given the Authority.

BE IT FURTHER RESOLVED, that this resolution be made a part of the Authority's minutes.

Dated this 12th day of February, 2015.

Signed _____

John H. Rocca, Chairman

Upon **MOTION** of Mr. Koblos, second by Mr. Kelley, the Board adopted the Resolution as presented. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Aye, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

6C. Resolution of Appreciation for Ralph Watson by Chairman Rocca

RESOLUTION OF APPRECIATION FOR

Ralph Watson

WHEREAS, Mr. Watson was appointed to the Loudoun Water Board in January of 2011, and served with distinction tirelessly and continuously through January 2015;

WHEREAS, Mr. Watson was Vice-Chairman of the Board and served on the Audit and CIP Committees and consistently participated in other meetings and workshops, providing important contributions and leadership; and chaired the Ad Hoc Architecture Committee during a period of significant growth and accomplishments at Loudoun Water leading to cost savings and superior design on the Potomac Water Supply Program;

WHEREAS, Mr. Watson provided unique contributions and unprecedented expertise in the architectural industry, as well as depth of knowledge, sound advice and expertise to staff and the board.

NOW, THEREFORE, BE IT RESOLVED, that Loudoun Water's members and staff express to Mr. Watson their deepest appreciation for his leadership and service; for the devotion he has so generously, effectively and graciously given the Authority.

BE IT FURTHER RESOLVED, that this resolution be made a part of the Authority's minutes.

Dated this 12th day of February, 2015.

Signed _____
John H. Rocca, Chairman

Chairman Rocca requested comments be added to the Resolution reflecting Mr. Watson's service as Vice-Chairman and describing his cost savings and design contributions.

Upon **MOTION** of Mr. Koblos, second by Mr. Kelley, the Board adopted the Resolution as amended. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Aye, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

AGENDA ITEM 7 – NEW BUSINESS - None.

AGENDA ITEM 8 – MONTHLY REPORTS - provided for review and discussion.

- A. Finance Summary Monthly Report by Mark Withrow
- B. Potomac Water Supply Program by Nicolle Boulay
- C. Water and Sewer Agreements by Fred Jennings

AGENDA ITEM 9 – QUARTERLY REPORTS – provided for review and discussion.

- A. BOA Quarterly Report by Mike Latham
- B. Land Development Activity Monthly Report by Mike Latham
- C. Asset Management Quarterly Report by Charlie Logue
- D. Safety Results Quarterly Report by Mark Withrow
- E. Water Treatment Division Compliance Summary Report by Beate Wright

AGENDA ITEM 10 – INFORMATIONAL ITEMS

None.

AGENDA ITEM 11 – CLOSED MEETING

Upon **MOTION** by Mr. Mitchel, second by Mr. Kelley, the Board moved to enter into Closed Meeting pursuant to Section 2.2-3711(A) Subsection 1. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Aye, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

The item(s) to be discussed are:

Discussion of Performance/salary - Chief Executive Employment Contract

Upon **MOTION** by Mr. Kelley, second by Mr. Mitchel, the Board voted to return to Open Meeting. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Aye, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

Upon **MOTION** by Mr. Kelley, second by Mr. Mitchel, the Board adopted the following Certification for Closed Meeting. Pursuant to Section 2.2-3711(d) of the Code of Virginia the Loudoun County Sanitation Authority hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the Loudoun County Sanitation Authority. **Vote:** Mr. Allen-Aye, Mr. Byers-Aye, Mr. Kelley-Aye, Mr. Koblos-Aye, Mr. McKinney-Aye, Mr. Mitchel-Aye, Mr. Rocca-Aye, Mr. Sultan-Aye, Mr. Whitmore-Aye.

There being no further business, this meeting adjourned at 5:45 PM.

Jewell R. Lilly, Board Secretary

Clarke, Janet
Sent: Thursday, March 12, 2015 9:03 AM
To: Ziviello, Ashley

From: Jennings, Fred [FJennings@loudounwater.org]
Sent: Wednesday, May 07, 2014 10:58 PM
To: Clarke, Janet
Cc: K, Scott; Peterson, Mark
Subject: Elevated Cost Comparison for Zone 600 Tanks

Dear Supervisor Clark:

Enclosed is the summary of cost analysis comparing the lifecycle costs for elevated steel tanks compared to at-grade steel tanks in the proposed 600 zone location. I apologize for the delay but we selected to have this analysis done by one of our engineering consultants on contract. They were thorough but lengthy.

The summary below presents the results. The NPV analysis is conservative – we used a discount rate of 4.5% and an inflation rate consistent with CPI of 3.0%. Lower rates increased the cost differential. That said, we believe the following is a fair representation of the incremental cost of ground storage over elevated storage, stated as NVP in 2014 dollars.

The following results presents the results of extensive cost modeling performed for us by Hazen & Sawyer.

- 40 yr life-cycle cost comparisons reflected a realistic sense of cost comparisons.
- Comparison is steel elevated storage tanks versus steel ground storage tanks with a booster pumping station
- Storage alternatives assume the same project schedule
 - 2018: Develop site and build 1 MG, Tank No. 1 (and 1 MG booster pumping station for ground alternative)
 - 2023: Build 1 MG, Tank No. 2
- Life cycle replacement intervals used for mechanical, electrical, equipment etc., and tank coatings are assumed similar for each alternative and are documented in tab "Guiding Assumption"
 - Refer to graph below for a summary of replacement items and intervals
 - The recommended intervals are similar to experiences with tanks and pump stations to date
- All cost estimates are "planning level" and are considered AACE Class 4 estimates typically used in feasibility/study phase
- Analysis assumptions were developed by Hazen and Sawyer based on project experiences, industry knowledge and specifically refined for our area considering 9 similar projects performed the last 5 years for Loudoun Water, Leesburg and Hagerstown
- Labor rate of \$100/hr and discount rate of 4.5% and inflation rate of 3.0% (from 2014 to 2018), per LW Finance

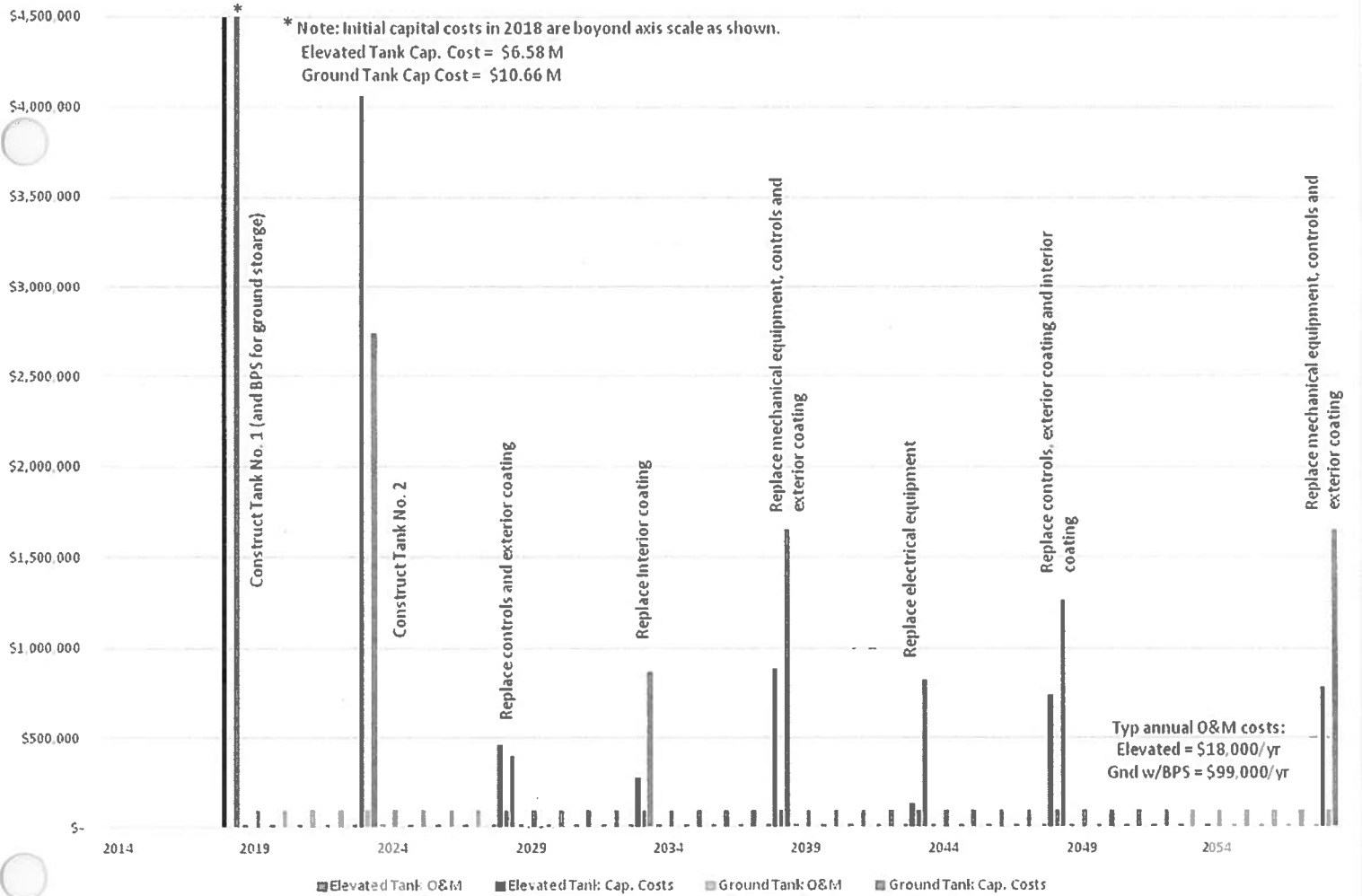
40 Year NPV Analysis Summary

Alternative	2014 Const Cost	2014 Project Cost (Const Cost + Eng/Admin @15%)	2018 Project Cost (2014 Project Cost + 3.0% Infl. Rate to 2018)	Present Value of Future Capital Costs	Annual Operating Cost	Present Value Factor	PV of Annual Operating Costs	40 Year Net Present Value
Elevated Storage Tank	\$5,160,000	\$5,860,000	\$6,596,000	\$4,433,000	\$18,000	18.4	\$332,000	\$11,361,000
Ground Storage Tank with Booster Pumping Station	\$8,310,000	\$9,480,000	\$10,670,000	\$4,482,000	\$99,000	18.4	\$1,822,000	\$16,974,000
Delta Net Present Value								\$5,613,000

- Delta NPV has expected accuracy range of -20% (\$4,490,400) to +35% (\$7,577,550) which is within AACE Class 4 typical range of -30% to +50%
- Costs for the ground storage alternative are consistently higher throughout the life of the facility due primarily to the construction (initial and replacement), operation (energy) and maintenance (labor) of the booster pumping station.

Estimated 40 Year Cash Curve (Expenditures)

600 Zone Water Storage Facility Comparisons



I hope this meets your needs. Please let me know if there is anything additional we can provide to you.

Warm regards,

Fred Jennings

FRED JENNINGS | GENERAL MANAGER

DIRECT 571.291.7969 | FAX 571.233.2910 | CELL 703.628.1158

FJENNINGS@LOUDOUNWATER.ORG

LOUDOUN WATER | 44865 LOUDOUN WATER WAY | ASHBURN, VA 20147-6109

WWW.LOUDOUNWATER.ORG

You are hereby advised that, pursuant to the Virginia Freedom of Information Act, written correspondence (including, but not limited to, letters, e-mails and faxes) from and to Loudoun Water and its Board of Directors and employees, and others acting on its behalf, may be subject to disclosure as a public record. This includes the e-mail address(es) and other contact and identifying information for parties involved in the correspondence.

600 Zone Water Storage Alternatives Estimated Capital Costs - Elevated Tank

Mar. 13

Baker Elevated Tank - 600-Zone Site Selection Study 2012		H&S Elevated Tank - 600-Zone Facility Plan 2006		H&S Elevated Tank - Water Master Plan 2012	
Tank Size	2 MG	Tank Size	3 MG	Tank Size	2 MG
Land	\$ -	Land	\$ -	Land	\$ -
Construction		Construction		Construction	
Tank ONLY	\$ 4,000,000	Tank ONLY	\$ 4,231,000	Tank ONLY	\$ 2,500,000
Site/Mech/Elec/Etc	\$ 605,000	Site/Mech/Elec/Etc	\$ 1,567,000	Site/Mech/Elec/Etc	\$ 800,000
Gen Repts	5% \$ 230,000	Gen Repts	5% \$ 290,000	Gen Repts	5% \$ 170,000
OH&P	10% \$ 460,000	OH&P	10% \$ 580,000	OH&P	10% \$ 330,000
Contingency	15% \$ 790,000	Contingency	15% \$ 1,000,000	Contingency	15% \$ 570,000
Subtotal	\$ 6,090,000	Subtotal	\$ 7,670,000	Subtotal	\$ 4,370,000
Engineering & Admin	20% \$ 1,220,000	Engineering & Admin	20% \$ 1,530,000	Engineering & Admin	20% \$ 870,000
Project Cost	\$ 7,310,000	Project Cost	\$ 9,200,000	Project Cost	\$ 5,240,000
Per gallon		Per gallon		Per gallon	
Tank ONLY	\$ 2.00	Tank ONLY	\$ 1.50	Tank ONLY	\$ 1.30
Site work, etc.	\$ 0.40	Site work, etc.	\$ 0.60	Site work, etc.	\$ 0.40
Total Const w/Conting.	\$ 3.10	Total Const w/Conting.	\$ 2.60	Total Const w/Conting.	\$ 2.20
Total Project	\$ 3.70	Total Project	\$ 3.10	Total Project	\$ 2.70

Average Cost Elevated Tank - Average Cost 2013	
Tank Size	2 MG
Land	\$ -
Construction	
Tank ONLY	\$ 3,100,000
Site/Mech/Elec/Etc	\$ 825,000
Gen Repts	5% \$ 200,000
OH&P	10% \$ 390,000
Contingency	15% \$ 680,000
Subtotal	\$ 5,200,000
Engineering & Admin	20% \$ 1,040,000
Project Cost	\$ 6,240,000
Per gallon	
Tank ONLY	\$ 1.60
Site work, etc.	\$ 0.50
Total Const w/Conting.	\$ 2.60
Total Project	\$ 3.20

Estimated Capital Costs - Ground Storage Tank

H&S 600-Zone Gnd Storage Tank & BPS Scenario 1 2013		H&S 600-Zone Gnd Storage Tank & BPS Scenario 2 2013		H&S 600-Zone Gnd Storage Tank & BPS Scenario 3 2013	
Tank Size	2 MG	Tank Size	2 MG	Tank Size	2 MG
Land	\$ -	Land	\$ -	Land	\$ -
Construction		Construction		Construction	
Tank ONLY	\$ 2,392,300	Tank ONLY	\$ 2,392,300	Tank ONLY	\$ 2,392,300
Site/Mech/Elec/Etc	\$ 4,414,700	Site/Mech/Elec/Etc	\$ 4,414,700	Site/Mech/Elec/Etc	\$ 6,374,700
Gen Repts	5% \$ 340,000	Gen Repts	5% \$ 340,000	Gen Repts	5% \$ 440,000
OH&P	10% \$ 680,000	OH&P	10% \$ 680,000	OH&P	10% \$ 880,000
Contingency	15% \$ 1,170,000	Contingency	15% \$ 1,170,000	Contingency	15% \$ 1,510,000
Subtotal	\$ 9,000,000	Subtotal	\$ 9,000,000	Subtotal	\$ 11,600,000
Engineering & Admin	20% \$ 1,800,000	Engineering & Admin	20% \$ 1,800,000	Engineering & Admin	20% \$ 2,320,000
Project Cost	\$ 10,800,000	Project Cost	\$ 10,800,000	Project Cost	\$ 13,920,000
Per gallon		Per gallon		Per gallon	
Tank ONLY	\$ 1.20	Tank ONLY	\$ 1.20	Tank ONLY	\$ 1.20
Site work, etc.	\$ 2.30	Site work, etc.	\$ 2.30	Site work, etc.	\$ 3.20
Total Const w/Conting.	\$ 4.50	Total Const w/Conting.	\$ 4.50	Total Const w/Conting.	\$ 5.80
Total Project	\$ 5.40	Total Project	\$ 5.40	Total Project	\$ 7.00

600 Zone Water Storage Alternatives Estimated Life Cycle Cost

Mar-13

Summary

Ground Storage Tank & WBPS				Elevated Storage Tank			
Tank Capacity	2	MG		Tank Capacity	2	MG	
Tank Style	Ground			Tank Style	Elevated		
WBPS Capacity	1	MGD		WBPS Capacity	N/A	MGD	
TOTAL LIFECYCLE COST (40 Years)	\$ 21,400,000	(2013 Dollars)		TOTAL LIFECYCLE COST (40 Years)	\$ 12,500,000	(2013 Dollars)	
Per gallon	\$ 10.70			Per gallon	\$ 6.30		
Accuracy Range (AACE Class 4)				Accuracy Range (AACE Class 4)			
High	35%	\$ 28,900,000		High	35%	\$ 16,900,000	
Low	-20%	\$ 17,200,000		Low	-20%	\$ 10,000,000	
Per gallon (High)	\$ 14.50			Per gallon (High)	\$ 8.50		
Per gallon (Low)	\$ 8.60			Per gallon (Low)	\$ 5.00		

H&S 600-Zone Gnd Storage Tank & BPS Scenario 1 2013				H&S 600-Zone Gnd Storage Tank & BPS Scenario 2 2013				H&S 600-Zone Gnd Storage Tank & BPS Scenario 3 2013				LW Elevated Tank - Scenario 4 2013			
Tank Capacity	2	MG		Tank Capacity	2	MG		Tank Capacity	2	MG		Tank Capacity	2	MG	
Tank Style	Ground			Tank Style	Ground			Tank Style	Ground			Tank Style	Elevated		
WBPS Capacity	1	MGD		WBPS Capacity	1	MGD		WBPS Capacity	1	MGD		WBPS Capacity	N/A	MGD	
1. Land	\$			1. Land	\$			1. Land	\$			1. Land	\$		
2. Capital Cost				2. Capital Cost				2. Capital Cost				2. Capital Cost			
Construction	\$ 9,000,000			Construction	\$ 9,000,000			Construction	\$ 11,600,000			Construction	\$ 5,200,000		
Engineering & Admin	\$ 1,800,000			Engineering & Admin	\$ 1,800,000			Engineering & Admin	\$ 2,320,000			Engineering & Admin	\$ 1,040,000		
Total Capital Cost	\$ 10,800,000			Total Capital Cost	\$ 10,800,000			Total Capital Cost	\$ 13,920,000			Total Capital Cost	\$ 6,240,000		
3. Annual Operating Cost	40 Years			3. Annual Operating Cost	40 Years			3. Annual Operating Cost	40 Years			3. Annual Operating Cost	40 Years		
Maintenance (WBPS)	0.25%	\$ 20,000		Maintenance (WBPS)	0.25%	\$ 20,000		Maintenance (WBPS)	0.25%	\$ 30,000		Maintenance (WBPS)	0.00%		
Maintenance (Tank)	2%	\$ 50,000		Maintenance (Tank)	2%	\$ 50,000		Maintenance (Tank)	2%	\$ 50,000		Maintenance (Tank)	2%	\$ 60,000	
Energy	\$ 88,790			Energy	\$ 95,420			Energy	\$ 76,700			Energy	\$ 73,450		
Total Annual Operating Cost	\$ 160,000			Total Annual Operating Cost	\$ 170,000			Total Annual Operating Cost	\$ 160,000			Total Annual Operating Cost	\$ 130,000		
O&M Cost (Lifetime)	\$ 6,400,000			O&M Cost (Lifetime)	\$ 6,800,000			O&M Cost (Lifetime)	\$ 6,400,000			O&M Cost (Lifetime)	\$ 5,200,000		
4. Mid-Life Rehab Cost	per gal.			4. Mid-Life Rehab Cost	per gal.			4. Mid-Life Rehab Cost	per gal.			4. Mid-Life Rehab Cost	per gal.		
Rehab (WBPS)	\$ 1.00			Rehab (WBPS)	\$ 1.00			Rehab (WBPS)	\$ 1.00			Rehab (WBPS)	\$ -		
Rehab (Tank)	\$ 0.50			Rehab (Tank)	\$ 0.50			Rehab (Tank)	\$ 0.50			Rehab (Tank)	\$ 0.50		
5. TOTAL LIFECYCLE COST	\$ 20,200,000			5. TOTAL LIFECYCLE COST	\$ 20,600,000			5. TOTAL LIFECYCLE COST	\$ 23,400,000			5. TOTAL LIFECYCLE COST	\$ 12,500,000		
Per gallon	\$ 10.10			Per gallon	\$ 10.30			Per gallon	\$ 11.70			Per gallon	\$ 6.30		
Accuracy Range (AACE Class 4)				Accuracy Range (AACE Class 4)				Accuracy Range (AACE Class 4)				Accuracy Range (AACE Class 4)			
High	35%	\$ 27,300,000		High	35%	\$ 27,900,000		High	35%	\$ 31,600,000		High	35%	\$ 16,900,000	
Low	-20%	\$ 16,200,000		Low	-20%	\$ 16,500,000		Low	-20%	\$ 18,800,000		Low	-20%	\$ 10,000,000	
Per gallon (High)	\$ 13.70			Per gallon (High)	\$ 14.00			Per gallon (High)	\$ 15.80			Per gallon (High)	\$ 8.50		
Per gallon (Low)	\$ 8.10			Per gallon (Low)	\$ 8.30			Per gallon (Low)	\$ 9.40			Per gallon (Low)	\$ 5.00		

600 Zone – Estimated Costs

Estimated Capital Costs for 600 Zone Tank Options

Elevated (Floating) Storage Two - 1 MG Tanks		\$ 6,200,000
Ground (Pumped) Storage Two - 1 MG Tanks & Pump Station	\$ 9,200,000	
W/M 1 (16" dia @ 14,500 lf)) Easements	\$ 3,270,000 \$ 340,000	
W/M 2 (16" dia @ 21,100 lf)) Easements	\$ 4,750,000 \$ 500,000	
		\$ 18,060,000

Estimated Annual Operating Costs for 600 Zone Tank Options

Elevated (Floating)	\$ 17,000 /year
Ground (Pumped)	\$ 99,000 /year

Clarke, Janet

From: Crosby, Susan <SCrosby@loudounwater.org>
Sent: Tuesday, March 03, 2015 2:26 PM
To: Clarke, Janet
Subject: FW: Loudoun Water Board Announcement

Hello,
Per Ashley's request, below is the announcement sent on behalf of the Board of Directors. The Board also voted to appoint Dale Hammes as interim General Manager. Please let me know if you need anything else.

Thank you,
Sue

SUE CROSBY | MANAGER OF OUTREACH AND EDUCATION
DIRECT 571.291.7893 | MOBILE 703.863.3947 | FAX 571.223.7910
SCROSBY@LOUDOUNWATER.ORG
LOUDOUN WATER | 44865 LOUDOUN WATER WAY | ASHBURN, VA 20147
WWW.LOUDOUNWATER.ORG

From: Lilly, Jewell
Sent: Wednesday, February 18, 2015 12:15 PM
Subject: Loudoun Water Board Announcement

On behalf of the Loudoun Water Board of Directors please see the following statement:

The Loudoun Water Board of Directors voted this morning to terminate the employment contract of its Chief Executive Fred Jennings. The Board appreciates Mr. Jennings' contributions to Loudoun Water.

Loudoun Water staff has no further comment at this time.

Thank you,

JEWELL CONNOR LILLY | BOARD SECRETARY | EXECUTIVE ASSISTANT
DIRECT 571.291.7970 | MOBILE 540.336.3948 | FAX 571.223.2910
JLILLY@LOUDOUNWATER.ORG
LOUDOUN WATER | 44865 LOUDOUN WATER WAY | ASHBURN, VA 20147
WWW.LOUDOUNWATER.ORG

You are hereby advised that, pursuant to the Virginia Freedom of Information Act, written correspondence (including, but not limited to, letters, e-mails and faxes) from and to Loudoun Water and its Board of Directors and employees, and others acting on its behalf, may be subject to disclosure as a public record. This includes the e-mail address(es) and other contact and identifying information for parties involved in the correspondence.
